



CITY OF LIVERMORE, CALIFORNIA
COMPREHENSIVE EMERGENCY MANAGEMENT PLAN

ANNEX G

LOCAL HAZARD MITIGATION PLAN ANNEX



COMPREHENSIVE EMERGENCY MANAGEMENT PLAN

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Local Hazard Mitigation Plan Annex

City of Livermore and Livermore Valley Joint Unified School District

Introduction

The City of Livermore is located 44 miles east of San Francisco along Interstate 580, which runs east-west through Alameda County. The Livermore Valley is edged to the north, south and east by rolling hills and to the west by the cities of Dublin and Pleasanton. The City was incorporated in 1876 and currently has an operating budget of \$124,000,000.

Livermore Valley Joint Unified School District has an average daily attendance of 13,700, has 22 school sites, 515 employees and an annual budget of 121,500,000.

Livermore covers 24 square miles and has a population of 73,345 people, based on the 2000 census.¹ Livermore's population grew steadily over the 30 year period from 1970-2000, with a 29% increase between 1990 and 2000.

For much of its history, Livermore has been an agricultural community. Following WWII, Nuclear research facilities became a prominent part of the Livermore landscape, with the employment that they provide being an important factor in Livermore's community growth in the post-war period. The City is now home to Lawrence Livermore National Laboratory (LLNL) and Sandia National Laboratory, two of its largest employers. LLNL and Sandia are U.S. Department of Energy (DOE) national laboratories, employing 8,100 people and 900 people respectively.

Livermore continues to attract high technology and computer-based businesses, and has shared in the rapid growth of the Bay Area's high tech industries over the past 20 years. The mix of jobs in Livermore has shifted somewhat during that time, with agriculture and transportation sectors declining in importance, and services and retail sectors experiencing strong growth. Even with this explosive growth, vineyards and ranches continue within and around the city today. (In 2002, the region had over 5,000 acres of vineyards and 24 wineries.)

The major artery through the Livermore Valley is Interstate 580, which feeds traffic from the Bay Area to the Central Valley of California. (196,000 is the Average Daily Traffic along Interstate 580 in Livermore).² With its connection to Interstate 5, it forms the major route between the Bay Area and Los Angeles.

The Livermore area is served by major freight lines of the Southern Pacific and Union Pacific Railroads. The Altamont Commuter Express commuter train runs three round trips daily during the work-week with an average daily rider count of about 1,500 people. WHEELS, a bus line operated by the Livermore Amador Valley Transit Authority, serves sixteen local routes serving Pleasanton, Dublin and Livermore.

¹ For complete Census information on this city, see <http://www.bayareacensus.ca.gov>

² http://www.interstate-guide.com/i-580_aadt.html



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The Livermore Municipal Airport is the nearest public airport. It has a 5,255 foot main paved runway and a second 2,700 foot unlighted training runway. The nearest airports with scheduled airline service are Oakland, San Jose and Stockton.

The Planning Process and Mitigation Activities

In 2002, Livermore created a hazard assessment as part of its new Emergency Management Plan. The City of Livermore last updated the Safety Element to its General Plan in 2004, which includes a discussion of earthquake, liquefaction, landslides, wildland fires, flood, dam failure, seiche, hazardous materials, and aviation hazards.

In October 2003, a telephone survey was conducted for several key businesses in Livermore such as: large employers, companies with hazardous materials, event facilities, top sales producers, etc. The survey listed questions on building safety, the number of employees per facility, access control, food service, personnel safety, critical infrastructure, fire prevention, replacement values, and hazardous materials. The data from these surveys along with the following information was used to update Livermore's All Hazard Vulnerability Analysis in February, 2004: the Safety Element of Livermore's General Plan, ABAG's hazard assessment data, USGS, FEMA's flood maps, CalTrans Seismic Hazard maps, University of California at Berkeley, California State Geological Survey, California Department of Forestry, California Department of Water Resources, California Highway Patrol, Zone 7 Water, and Livermore-Pleasanton Fire Department Hazardous Materials Area Plan, etc.

Many of the activities conducted by the City, as well as Livermore's All Hazard Vulnerability Analysis (February 2004), were fed into the planning process for the multi-jurisdictional plan. The City participated in various ABAG workshops and meetings, including the general kick-off meeting and ABAG's Pacific Security conference, etc. In addition, the City has provided written and oral comments on the multi-jurisdictional plan. Finally, Livermore provided detailed information on facilities that are viewed as "critical" to ABAG.

Key City staff met on several occasions to identify and prioritize the mitigation strategies appropriate for the City. Livermore staff involved in the February 14th mitigation strategy meeting included Building Official, Police Captain, Public Services Director, Public Services Manager, EMS Manager from Livermore-Pleasanton Fire Department (LPPD), Fire Marshall from LPPD, Disaster Preparedness Coordinator from LPPD. The following representatives also attended from Pleasanton: Chief Building Official, Planning Director, Principal Planner, Principal Planner, and Police Captain. The Assistant Director of Public Works from Pleasanton was not able to attend, but discussed with LPPD's Disaster Preparedness Coordinator separately about the mitigation strategies.

Since the school districts and local hospitals were not able to attend the February 14th meeting, LPPD met separately with Valley Care Hospital on February 23rd and with Livermore Unified School District on February 28th.

Another meeting was conducted on March 22nd with the Public Services Manager, Disaster Preparedness Coordinator from LPPD, and the Fire Marshall from LPPD. From Pleasanton, the following attended: 2 Principle Planners, Plan Checker, and the Assistant Director of Public Works. Additional agencies that attended included Livermore Valley

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Joint Unified School District, Pleasanton Unified School District, and two representatives from Zone 7 Water. Las Positas College and CalWater, a private company, were also invited, but did not attend. LPFD met with Valley Care Memorial on March 23rd to obtain several of the health mitigation priorities.

In addition to the large group meetings, additional follow up occurred via telephone and email to solidify the mitigation plan and priorities. The Mitigation Plan was also put on the City of Livermore's website, and comments were invited to be sent to LPFD's Disaster Preparedness Coordinator.

After FEMA's review and approval of the Livermore Annex to the multi-jurisdictional plan, Livermore placed on the City Council agenda a resolution adopting the plan and strategies on December 12, 2005. The mitigation strategies are now an annex to Livermore's Emergency Management Plan.

Hazard and Risk Assessment

The ABAG multi-jurisdictional Local Hazard Mitigation Plan, to which this is an Annex, lists nine hazards that impact the Bay Area, five related to earthquakes (faulting, shaking, earthquake-induced landslides, liquefaction, and tsunamis) and four related to weather (flooding, landslides, wildfires and drought). These hazards also impact this community, with the exception of tsunamis. Livermore does not border the Pacific Ocean or the Bay, so tsunamis are not a hazard in this area.

The multi-jurisdictional plan did not detail out the hazardous materials and aviation hazards, or the risks from having two U.S. Department of Energy National Laboratories in the City of Livermore. The multi-jurisdictional plan also did not detail out Livermore's flood or landslide history or mention the Las Positas Fault Line that runs through Livermore. This information is provided below from Livermore's All Hazard Vulnerability Analysis and Livermore's Safety Element to the General Plan.

Information on disasters declared in Alameda County is at:
<http://quake.abag.ca.gov/mitigation/disaster-history.html>

The City examined the hazard exposure of the City urban land based on the information at ABAG's website at <http://quake.abag.ca.gov/mitigation/pickdbh2.html>. Of the 10,358 urban acres in the City:

- Earthquake Faulting — According to the CGS Alquist-Priolo Earthquake Fault Zone information on the ABAG website, the Greenville fault runs through the City. Most of the acres in this zone are not in urban use; only 12 urban acres are within this zone, and few if any buildings are actually astride the fault.
- Earthquake Shaking—All 10,358 urban acres are in the moderate category of shaking potential, due to the close proximity of the Calaveras Fault, Mt. Diablo Thrust Fault, Greenville Fault and Hayward Fault.
- Earthquake-Induced Landslides – The California Geological Survey has not completed mapping of this hazard in the City of Livermore. However, because few

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areas have been mapped as landslides, this hazard is viewed as similar to that posed by weather-related landslides as shown below.

- Earthquake Liquefaction—7,652 urban acres are in areas of moderate, high or very high liquefaction susceptibility
- Flooding—675 urban acres are in the 100-year FEMA flood plain, while 650 urban acres are in the 500 year flood plain
- Landslides —3 urban acres are in mostly existing landslide areas
- Wildfires—247 urban acres are subject to high or very high wildfire threat, while 5,704 acres are in wildland-urban interface threat areas
- Dam Inundation—1,722 acres are subject to dam inundation due to the Patterson Dam and Lake Del Valle Dam. A failure of the Del Valle Dam would affect the far southwestern portion of Livermore, whereas a failure of the Patterson Dam would affect the northeastern portion of the city. From Livermore's All Hazard Assessment, the 235-foot Del Valle Dam impounds a reservoir with a total capacity of 77,100 acre-feet. To provide a flood control reserve, it normally stores from 25,000 to 40,000 acre-feet. (An acre-foot is 325,900 gallons, enough water to cover one acre of land one foot deep.)
- Drought—all acres are subject to drought

The City of Livermore also examined the hazard exposure of infrastructure based on the information on ABAG's website at <http://quake.abag.ca.gov/mitigation/pickdbh2.html>. Of the 348 miles of roadway, 12 miles of railroad and 328 miles of underground pipeline in the City (Note that some of the hazards listed below would not affect the underground pipeline in those areas. In addition, these pipelines carry water, petroleum and natural gas.):

- Earthquake Faulting — According to the CGS Alquist-Priolo Earthquake Fault Zone information on the ABAG website, the Greenville fault runs through the City. Most of the acres in this zone are not in urban use; only 3 miles of roadway are within this zone. However, some major routes, including I-580, cross this fault on the east side of the City.
- Earthquake Shaking—348 miles of roadway, 12 miles of railroad, and 328 miles of pipeline are in the moderate to high categories of shaking potential
- Earthquake-Induced Landslides – The California Geological Survey has not completed mapping of this hazard in the City of Livermore. However, because few areas have been mapped as landslides, this hazard is viewed as similar to that posed by weather-related landslides as shown below.
- Earthquake Liquefaction—244 miles of roadway, 7 miles of railroad, and 237 miles of pipeline are in areas of moderate, high or very high liquefaction susceptibility
- Flooding—20 miles of roadway, 1 mile of railroad and 20 miles of pipeline are in the FEMA 100 year flood plain, while 16 miles of roadway, 1 mile of railroad, and 16 miles of pipeline are in the 500 year flood plain

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- Landslides—1 mile of roadway and 1 mile of pipeline are in mostly existing landslide areas
- Wildfires—11 miles of roadway and 9 miles of pipeline (water and natural gas) is in a high or very high wildfire threat areas, while 199 miles of roads, 4 miles of railroad and 190 miles of pipeline are in wildland-urban interface threat areas
- Dam Inundation—50 miles of roadway, 49 miles of pipeline and 7 miles of railroad are subject to dam inundation
- Drought—is not a hazard for roadways

Finally, the City of Livermore examined the hazard exposure of critical healthcare facilities, schools, city-owned buildings and bridges and interchanges based on ABAG's website at <http://quake.abag.ca.gov/mitigation/pickcrit.html>. Of the critical facilities in the City:

- Earthquake Faulting —No critical facilities are within the Alquist-Priolo Earthquake Fault Zone
- Earthquake Shaking—All 43 critical city-owned facilities, 26 schools, and 5 healthcare facilities (includes hospital, long-term care, primary care and home health agency), and 19 locally-owned bridges and interchanges (Highway and road structures, including freeway interchanges, small bridges over creeks, etc) are subject to moderate earthquake shaking potential
- Earthquake-Induced Landslides – The California Geological Survey has not completed mapping of this hazard in the City of Livermore. However, this hazard is viewed as similar to that posed by weather-related landslides as shown below.
- Earthquake Liquefaction—37 city-owned facilities, 19 schools, 5 healthcare facilities and 16 bridges and interchanges are in areas of moderate, high or very high liquefaction susceptibility
- Flooding—12 city-owned facilities, 1 school and 7 bridges and interchanges are in the FEMA 500 year flood plain; 1 city-owned facility, 1 hospital, 1 school, and 1 bridge/interchange are in the 100 year flood plain
- Landslides—None of the before-mentioned facilities or bridges are in mostly existing landslide areas
- Wildfires—While no schools, health care facilities or bridges/interchanges are located in areas of high or very high wildland fire threat, 1 city-owned facility is located in this area
- Wildfires—22 city-owned facilities, 15 schools, 2 health care facilities and 11 bridges/interchanges are in the wildland-urban interface threat areas
- Dam Inundation—1 city-owned facility, 3 schools and 5 bridges/interchanges are in an area subject to dam inundation
- Drought—drought will not affect city buildings directly.



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Earthquakes

Much of the information on earthquakes in Livermore's All Hazard Vulnerability Analysis uses ABAG's data. ABAG, however, did not list the Las Positas Fault, which is discussed in Livermore's Safety Element of the General Plan (2003). This fault, which is considered to be active, trends northeast to southwest approximately 2.5 miles to the southeast of the Downtown. The Las Positas fault could potentially generate an earthquake of magnitude 6.3. Because of the high level of seismic activity in and around Livermore, the area has been classified as seismic risk Zone 4 (the highest risk category) by the California Building Code.

Landslides

Most of the Northwest corner of the City is susceptible to landslides, with the majority of slopes considered marginally susceptible to most susceptible to slope failure. In addition, isolated upland areas in the northeast, central and southeast portions of the City are considered prone to slope failure. Refer to the City of Livermore's General Plan Public Safety Element and All Hazard Vulnerability Assessment for additional details.

Hazardous Materials

According to Livermore's All Hazard Vulnerability Analysis, Livermore's proximity to large U.S. Department of Energy facilities creates a unique risk to public safety by the transportation of quantities of various radioactive materials. In case of an accident, small amounts of radioactive materials can be dislodged from their protective containers and become extremely difficult to locate, necessitating evacuation of large areas.

In addition, the Livermore/Pleasanton area contains some industrial development that may be associated with hazardous materials uses. Land uses involving hazardous materials or other hazards include the airport, hazardous waste transfer facilities, paint and paint product manufacturing facilities, semiconductor manufacturers, medical device manufacturers, and petroleum product and natural gas pipelines.

The area is home to numerous businesses and industries that manufacture, store, use, and dispose of hazardous materials and hazardous waste. Some of these businesses are neighbors to urbanized population areas.

In addition to the hazards of stored chemicals, there are hazards of transporting chemicals into and through the area. Most hazardous materials are regularly carried on railroads and the freeways and major roads designated as explosive routes by CALTRANS and the Highway Patrol. The proximity of some of these routes to large numbers of people suggests that an accident involving hazardous materials transportation could reach disaster proportions. The extreme toxicity of some chemicals used in the area and the specialized handling and cleanup procedures required during an accident can close major thoroughfares and necessitate evacuation.

The Union Pacific/Southern Pacific Railroads conduct rail operations in the Livermore area. Cargoes of electronics, fabricated metals, plastics, precision machinery, agricultural chemicals, construction materials, rock/sand/gravel aggregates and other hazardous materials are also shipped over the rail lines.



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A spill of bulk hazardous materials could result in fire, explosion, toxic cloud or direct contamination of people and property. The effects may involve a local site or many square miles. Health problems may be immediate, such as corrosive effects on skin and lungs, or may be eventual, such as the development of cancer from a carcinogen. Damage to property could range from immediate destruction by explosion to permanent contamination by a persistent hazardous substance.

The I-580 corridor affords a large amount of truck movement from the Bay Area to the Central Valley. At its eastern end, it connects to Interstate 5, the major north-south route through California, and at its west end, Interstate 80, the major east-west route through Northern California. The weigh station operated by the California Highway Patrol at Vasco Road reports that, on a month-by-month basis, an average of 25,000 trucks pass through that facility. Approximately 8% of those trucks, or 2,000 trucks per month, display hazardous materials placards. Assuming each vehicle had an average load weight of 35,000 pounds... that would convert to approximately 35,000 tons of placarded material a month moving through the I-580 corridor.

The Livermore-Pleasanton Fire Department Hazardous Materials Area Plan contains additional specific details regarding Hazardous Materials Incident potential.

U.S. Department of Energy Facilities

There are two U. S. Department of Energy (DOE) Facilities operating in the Livermore area that were not discussed in ABAG's plan. They are:

The Lawrence Livermore National Laboratory (LLNL), located in eastern Livermore surrounded by Vasco Road on the west, East Avenue on the south and Greenville Road on the east; and

The Sandia National Laboratory (SNL), located south of LLNL with its northern boundary as East Avenue, Vasco Road on the west, Greenville Road on the East and Tesla Road on the south.

As DOE National Laboratories, these facilities work in partnership with universities and industry to enhance the security, prosperity and well-being of the nation by providing scientific and engineering solutions to meet national needs in nuclear weapons and related defense systems, energy security and environmental integrity.

The primary function of the labs is to conduct scientific research. The majority of activities are directly related to specific research projects or to support the general laboratory infrastructure.

In addition to having the following potential hazards, the LLNL has been designated as a potential terrorist target.

The sites conduct significant research in the following fields:

Combustion Research

Typical hazards include standard industrial and laboratory hazards including custom electrical equipment, lasers, fuels, compressed gases, and combustible materials. Other



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hazards include the handling of chemical, reactive, toxic, thermal and energetic materials. Chemical emissions are small and are related to small-scale chemical use in the laboratory.

Micro and Nano Technologies

Typical hazards are associated with lasers, chemicals, microwave radiation, and organic and inorganic and toxic materials. Other hazards include standard industrial hazards such as high voltages, power and hand tools, and electronic test equipment.

Chemical and Radiation Detection

Routine hazards are associated with lasers, chemicals, microwave radiation, flames and furnaces, cryogenic materials, compressed gases, and organic, inorganic and toxic materials including toxins, toxin fragments, and bio-hazardous materials. Standard industrial hazards include high voltages, hot and cold surfaces, and test equipment.

Weapons Research & Development

Typical hazards include standard industrial hazards including compressed gases, cryogenic materials and energetic materials. Other hazards include radioactive, toxic, thermal and energetic materials.

Materials and Chemistry Research & Development

Routine hazards include lasers, chemicals, microwave radiation, flames and furnaces, compressed gases, cryogenic materials, extreme ultraviolet radiation, ionizing radiation from accelerators, and organic and inorganic and energetic materials. Other hazards include cutting, grinding and etching, as well as the use of high voltages, power and hand tools, electronic test equipment and power supplies.

Explosives Storage

Routine hazards include explosive hazards classified by DOT as either 1.1 (mass detonating), 1.2 (non-mass detonating, fragment-producing), 1.3 (mass fire), and 1.4 (moderate fire-no blast).

All activities utilize various quantities of liquid nitrogen and liquid argon.

Safeguards

Each facility maintains specific contingency plans for hazardous materials incident handling. LLNL's fire department is especially trained and equipped to handle incidents at each of the sites, as well as for mutual aid off site to the Livermore-Pleasanton Fire Department.

Floods

The following information was taken from Livermore's All Hazard Vulnerability Assessment and Livermore's General Plan's Safety Element. The 100 year and 500 flood maps in

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ABAG's plan were also used in each of the plans mentioned above. Below is additional information on the flood history and information that is specific to Livermore that was not mentioned in the ABAG plan.

The City of Livermore is located in the Livermore Valley, which lies in the Alameda Creek basin. The area is drained by Arroyo de la Laguna and its tributaries. Although Livermore generally experiences a Mediterranean climate with moderate rainfall (an average of 14.5 inches of rain per year), analysis of long-term precipitation records indicate that wetter and drier cycles lasting several years are common in the region. Potentially damaging rainfalls occur at a frequency of every three years. Hazards often result when the City experiences above-normal rainfalls over a short duration, resulting in increased runoff and flooding along area creeks, such as the Arroyo Las Positas, Arroyo Mocho and Altamont Creek and in areas with poor drainage.

As a result of good planning and system maintenance, the Livermore-Amador Valley has experienced minimal flood damage compared with other areas of California. Storm damage over the past five years has required three major repair projects at a total cost of \$2.6 million. To finance repairs associated with federally declared disasters in early 1995, Zone 7 requested funding from the Federal Emergency Management Agency (FEMA). Zone 7 has also applied for assistance from the U.S. Army Corps of Engineers for repair of future damage.

Historically, flooding has been a problem in the following areas:

- Arroyo Mocho from the city limits downstream to Wente Street;
- Arroyo Las Positas within the city from its confluence with Altamont Creek downstream to El Charro Road;
- Altamont Creek from its confluence with Arroyo Las Positas upstream to the corporate limits;
- Arroyo Seco from its confluence with Arroyo Las Positas upstream to South Vasco Road;
- Arroyo Las Positas Relocation from its confluence with Arroyo Seco upstream to the corporate limits;
- Arroyo Del Valle from Holmes Street downstream to Isabel Avenue
- Cayetano Creek from its confluence with Arroyo Las Positas upstream to the corporate limits;
- Collier Creek from its confluence with Arroyo Las Positas upstream to the corporate limits

Today, according to the Flooding Insurance Rate Maps (FIRMS), the majority of Livermore is designated as subject to minimal flooding, as demonstrated in ABAG's information. However, 100-year flood zones are located along Arroyo Del Valle in the extreme southwestern portion of Livermore, along Altamont Creek between Broadmoor to Springtown Road, along Las Positas Creek from I-580 to El Charro Road, along Arroyo Mocho from Wente Street to Stanley Boulevard, and from .5 miles west of Isabel Parkway to El Charro Road. Areas of minimum flooding also occur along Arroyo Seco and within a triangular area that is generally bound by Arroyo Seco to the East, Highway 84 to the North, and a line extending approximately 0.5 mile to the north of East Avenue on the south.



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Aviation Hazards

The Livermore Municipal Airport affects land uses in the form of noise and safety impacts. The Airport Protection Area (APA), which was established by the City in 1991 as an additional protection area beyond the minimum required by the FAA. The APA extends 5,000 feet beyond the runways to the north, south, and east, and 7,100 feet to the west (the typical take-off direction). The APA protects the Airport from the encroachment of incompatible uses, particularly the construction of new, or expansion of existing residential areas, considered necessary to enhance public safety. (Livermore General Plan's Safety Element, 2003)

Drought

Drought, though a potential problem in the City, is not fully assessed. The City will work with ABAG and various water supply agencies on this issue.

The City plans to work with ABAG to develop specific information about the kind and level of damage to buildings, infrastructure, and critical facilities which might result from any of the hazards previously noted. The ABAG Annex states that ABAG will be doing this work in 2005 through early 2006.

As these impacts are not fully developed, the City and School District have reviewed the hazards identified and ranked the hazards based on past disasters and expected future impacts. The conclusion is that earthquakes (particularly shaking), hazardous material spill, flooding, wildfire, and landslides (including unstable earth) pose a significant risk for potential loss in the City of Livermore.

Earthquakes (particularly shaking and earthquake liquefaction), hazardous materials release and the wildland-urban interface fire threat pose a significant risk for potential loss to Livermore Valley Joint Unified School District. In addition, three schools are in the dam inundation area and one school is in the 100 year flood plain.

Mitigation Priorities

As a participant in the ABAG multi-jurisdictional planning process, City of Livermore staff helped in the development and review of the comprehensive list of mitigation strategies in the overall multi-jurisdictional plan. The list was discussed at the meetings discussed above on February 14th and March 22nd, 2005. At the meeting, all of the mitigation strategies were reviewed. The tentative decision on priority was made based on a variety of criteria, not simply on an economic cost-benefit analysis. These criteria include being technically and administratively feasible, politically acceptable, socially appropriate, legal, economically sound, and not harmful to the environment or our heritage.

Over time, we are committed to developing better hazard and risk information to use in making those trade-offs. We are not trying to create a disaster-proof region, but a disaster-resistant one. In addition, several of the strategies are existing City programs.

Livermore Valley Joint Unified School District (LVJUSD) also helped in the development and review of the list of mitigation strategies. They discussed the priorities in meetings on February 28 and March 22, 2005, as well as in follow up calls and emails. All school



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buildings have been retrofitted with the exception of Del Valle School, which is currently in process of being retrofitted (estimated completion date is 2007). The District office is a Department of the State Architect (DSA) compliant structure. Part of it was retrofitted in 1990 and the newer section of the district office was built in 1999. All structures are also in compliance with the DSA requirements. The School District has only a few critical non-structural items mitigated. Additional funding is needed in order to effectively do non-structural mitigation.

These draft priorities were submitted to the Fire Chief for review and approval. (The Livermore-Pleasanton Fire Department is the agency which is charged with disaster preparedness in the City of Livermore.) After FEMA completed the review and approval of this Annex to the ABAG multi-jurisdictional plan, Livermore placed on the City's website the mitigation plan for further public input. Livermore's City Council then passed a resolution adopting the plan and strategies on December 12, 2005. The mitigation strategies are now an annex to Livermore's Emergency Management Plan.

After FEMA approves the multi-jurisdictional plan, LVJUSD will place on the agenda for the School Board a resolution adopting the plan and strategies. The mitigation strategies will become an annex to LVJUSD Emergency Management Plan.

The Plan Maintenance and Update Process

Livermore-Pleasanton Fire Department and Livermore Valley Joint Unified School District will ensure that monitoring of this Annex will occur. The plan will be monitored on an on-going basis. However, the major disasters affecting our community, legal changes, notices from ABAG as the lead agency in this process, and other triggers will be used.

The Annex will be a discussion item on the agenda of the meeting of City department heads at least once a year following the adoption of the mitigation plan. At that meeting, the department heads will focus on evaluating the Annex in light of technical and political changes during the past year or other significant events. This group will be responsible for determining if the plan should be updated. For Livermore Valley Joint Unified School District (LVJUSD), the Maintenance Operations Director will ensure that annual monitoring of this annex will occur.

The City of Livermore and LVJUSD are committed to reviewing and updating this plan annex at least once every five years, as required by the Disaster Mitigation Act of 2000. Livermore-Pleasanton Fire Department and LVJUSD will contact ABAG four years after this plan is approved to ensure that ABAG plans to undertake the plan update process. If so, the City and District again plans to participate in the multi-jurisdictional plan. If ABAG is unwilling or unable to act as the lead agency in the multi-jurisdictional effort, other agencies will be contacted, including Alameda County's Office of Emergency Services. Counties should then work together to identify another regional forum for developing a multi-jurisdictional plan.

The public will continue to be involved whenever the plan is updated, and as appropriate during the monitoring and evaluation process. Prior to adoption of the updates, the City will provide the opportunity for the public to comment on the updates.